http://www.fcc.gov/mmb/asd/decdoc/letter/1985-12-09—sample.html.

- (c) In the event that the antenna monitor sampling system is temporarily out of service for repair or replacement, the station may be operated, pending completion of repairs or replacement, for a period not exceeding 120 days without further authority from the FCC if all other operating parameters and the field monitoring point values are within the limits specified on the station authorization.
- (d) If the antenna sampling system is modified or components of the sampling system are replaced, the following procedure shall be followed:
- (1) Special Temporary Authority (see §73.1635) shall be requested and obtained from the Commission's Audio Services Division, Mass Media Bureau in Washington to operate with parameters at variance with licensed values pending issuance of a modified license specifying parameters subsequent to modification or replacement of components.
- (2) Immediately prior to modification or replacement of components of the sampling system not on the towers, and after a verification that all monitoring point values, base current ratios and operating parameters are within the limits or tolerances specified in the instrument of authorization or the pertinent rules, the following indications must be read for each radiation pattern: Final plate current and plate voltage, common point current, base currents and their ratios, antenna monitor phase and current indications, and the field strength at each monitoring point. Subsequent to these modifications or changes the above procedure must be repeated.
- (3) If that portion of the sampling system above the base of the towers is modified or components replaced, a partial proof of performance shall be executed in accordance with §73.154 subsequent to these changes. The partial proof of performance shall be accompanied by common point impedance measurements made in accordance with §73.54.
- (4) Request for modification of license shall be submitted to the FCC in Washington, DC, within 30 days of the

- date of sampling system modification or replacement. Such request shall specify the transmitter plate voltage and plate current, common point current, base currents and their ratios, antenna monitor phase and current indications, and all other data obtained pursuant to this paragraph.
- (e) If an existing sampling system is found to be patently of marginal construction, or where the performance of a directional antenna is found to be unsatisfactory, and this deficiency reasonably may be attributed, in whole or in part, to inadequacies in the antenna monitoring system, the FCC may require the reconstruction of the sampling system in accordance with requirements specified above.
- [41 FR 7405, Feb. 18, 1976, as amended at 42 FR 24056, May 12, 1977; 44 FR 58731, Oct. 11, 1979; 46 FR 35462, July 8, 1981; 48 FR 38478, Aug. 24, 1983; 48 FR 44805, Sept. 30, 1983; 49 FR 32358, Aug. 14, 1984; 50 FR 47054, Nov. 14, 1985; 51 FR 9965, Mar. 24, 1986; 51 FR 40435, Nov. 7, 1986; 56 FR 64859, Dec. 12, 1991; 63 FR 33876, June 22, 1998]

§ 73.69 Antenna monitors.

- (a) Each station using a directional antenna must have in operation at the transmitter site an FCC authorized antenna monitor. However, if the station authorization sets specific tolerances within which the phase and amplitude relationships must be maintained, or requires the use of a monitor of specified repeatability, resolution or accuracy, the antenna monitor used will be authorized on an individual basis.
- (1) Normally, the antenna monitor is to be installed immediately adjacent to the transmitter and antenna phasing equipment. However, the monitor may be located elsewhere provided that its environment is maintained at all times within those limits under which the monitor was type-approved.
- (2) The antenna monitor installed at a station operating a directional antenna by remote control or when the monitor is installed in the antenna field at a distance from the transmitter, must be designed and authorized for such use in accordance with the provisions of §73.53(b)(9).

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- (b) In the event that the antenna monitor sampling system is temporarily out of service for repair or replacement, the station may be operated, pending completion of repairs or replacement, for a period not exceeding 120 days without further authority from the FCC if all other operating parameters, and the field monitoring point values are within the limits specified on the station authorization.
- (c) If conditions beyond the control of the licensee prevent the restoration of the monitor to service within the allowed period, an informal letter request in accordance with §73.3549 of the Commission's rules must be filed with the FCC, Attention: Audio Services Division, Mass Media Bureau in Washington, DC for such additional time as may be required to complete repairs of the defective instrument.
- (d) If an authorized antenna monitor is replaced by another antenna monitor, the following procedure shall be followed:
- (1) Temporary authority shall be requested and obtained from the Commission in Washington to operate with parameters at variance with licensed values, pending issuance of a modified license specifying new parameters.
- (2) Immediately prior to the replacement of the antenna monitor, after a verification that all monitoring point values and base current ratios are within the limits or tolerances specified in the instrument of authorization or the pertinent rules, the following indications must be read for each radiation pattern: Final plate current and plate voltage, common point current, base currents, antenna monitor phase and current indications, and the field strength at each monitoring point.
- (3) With the new monitor substituted for the old, all indications specified in paragraph (d)(2) of this section, again must be read. If no change has occurred in the indication for any parameter other than the indications of the antenna monitor, the new antenna monitor indications must be deemed to be those reflecting correct array adjustments
- (4) If it cannot be established by the observations required in paragraph (d)(2) of this section that base current ratios and monitoring point values are

- within the tolerances or limits prescribed by the rules and the instrument of authorization, or if the substitution of the new antenna monitor for the old results in changes in these parameters, a partial proof of performance shall be executed and analyzed in accordance with §73.154.
- (5) An informal letter request for modification of license shall be submitted to the FCC, Attention: Audio Services Division, Mass Media Bureau in Washington, DC within 30 days of the date of monitor replacement. Such request shall specify the make, type, and serial number of the replacement monitor, phase and sample current indications, and other data obtained pursuant to paragraph (d) of this section.
- (e) The antenna monitor must be calibrated according to the manufacturer's instructions as often as necessary to ensure its proper operation.
- (Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, as amended, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply secs. 301, 303, 307, 48 Stat. 1081, 1082, as amended, 1083, as amended, 47 U.S.C. 301, 303, 307)

[38 FR 1918, Jan. 19, 1973, as amended at 40 FR 15884, Apr. 8, 1975; 40 FR 25459, June 16, 1975; 40 FR 27939, July 2, 1975; 41 FR 22942, June 8, 1976; 41 FR 32892, Aug. 6, 1976; 43 FR 4022, Jan. 31, 1978; 45 FR 26062, Apr. 17, 1980; 48 FR 38478, Aug. 24, 1983; 49 FR 3999, Feb. 1, 1984; 50 FR 47054, Nov. 14, 1985; 51 FR 9965, Mar. 24, 1986; 56 FR 64859, Dec. 12, 1991; 60 FR 55480, Nov. 1, 1995; 63 FR 33876, June 22, 1998]

§73.72 Operating during the experimental period.

- (a) An AM station may operate during the experimental period (the time between midnight and sunrise, local time) on its assigned frequency and with its authorized power for the routine testing and maintenance of its transmitting system, and for conducting experimentation under an experimental authorization, provided no interference is caused to other stations maintaining a regular operating schedule within such period.
- (b) No station licensed for "daytime" or "specified hours" of operation may broadcast any regular or scheduled program during this period.
- (c) The licensee of an AM station shall operate or refrain from operating